

Amendments to the Claims:

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-142. (Previously Cancelled)

143. (Previously Presented) A method for making a palladium-containing film, the method comprising the steps of:

applying a layer of paste to a substrate, said paste including particles dispersed in a carrier liquid, said particles including a metallic phase with greater than about 10 weight percent palladium and being substantially free of alkaline earth metals, said particles having a weight average size of from about 0.1 micron to about 4 microns;

removing said carrier liquid from said layer of paste and forming on said substrate a film including palladium from said particles;

wherein, said metallic phase is substantially polycrystalline with a mean crystallite size of larger than about 50 nanometers and said particles have a resistance to oxidation of said palladium in said particles such that, when said particles are heated in an atmosphere of industrial grade air at atmospheric pressure to a temperature of 900° C at a heating rate of about 10° C per minute during thermogravimetric analysis, said particles demonstrate a maximum weight gain of no greater than about 40 percent relative to a theoretical weight gain for complete oxidation of said palladium in said particles.

144. (Previously Presented) A method for making a palladium-containing film, the method comprising the steps of:

applying a layer of paste to a substrate, said paste including palladium-containing particles dispersed in a carrier liquid, said particles having a weight average size of from about 0.1 micron to about 3 microns;

removing said carrier liquid from said layer of paste and forming on said substrate a film including palladium from said particles;

wherein, said particles have a size distribution such that greater than about 90 weight percent of said particles are smaller than about twice said weight average size and said particles are multiphase particles including a first material phase comprising palladium and at least about 0.5 weight percent of a second material phase being substantially free of palladium.

145. (Original) The method of Claim 144, wherein:

said first material phase comprises greater than about 50 weight percent of said particles.

146. (Original) The method of Claim 144, wherein:

said second material phase comprises less than about 30 weight percent of said particles.

147. (Original) The method of Claim 144, wherein:

said first material phase is electrically conductive and said second material phase is dielectric.

148. (Original) The method of Claim 144, wherein:

said substrate comprises a dielectric material for a capacitor and said second material phase of said particles also comprises said dielectric material.

149. (Previously Presented) The method of Claim 147, wherein:

said dielectric material is a titanate.

150. (Original) The method of Claim 144, wherein:

said second material phase comprises an oxide material.

151. (Original) The method of Claim 144, wherein:

said second material phase comprises a ceramic material.

152. (Original) The method of Claim 144, wherein:

said step of forming on said substrate a film including palladium from said particles comprises heating said particles, on said substrate, to a temperature of greater than about 300°C.

153. (Original) The method of Claim 144, wherein:

said method further comprises preparing a structure of stacked layers including a plurality of first layers including a dielectric material and second layers including said particles; and

heating said structure to a temperature of greater than about 300° C to form a microelectronic structure including a plurality of palladium-containing films, having palladium from said particles, and including a plurality of dielectric layers, with at least one of said dielectric layers being between two adjacent of said palladium-containing films.

154-167. (Previously Cancelled)

168. (Previously Presented) The method of Claim 143, wherein said metallic phase comprises greater than about 50 weight percent palladium.

169. (Previously Presented) The method of Claim 143, wherein said metallic phase comprises greater than about 60 weight percent palladium.

170. (Previously Presented) The method of Claim 143, wherein said metallic phase further comprises silver.

171. (Previously Presented) The method of Claim 143, wherein said particles demonstrate a maximum weight gain of less than about 30 percent relative to a theoretical weight gain for complete oxidation of said palladium in said particles.

172. (Previously Presented) The method of Claim 144, wherein said multiphase particles comprise not greater than about 10 weight percent of said second material phase.